

Purdue Univ. PHARM.

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PURDUE UNIVERSITY

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SCHOOL OF PHARMACY

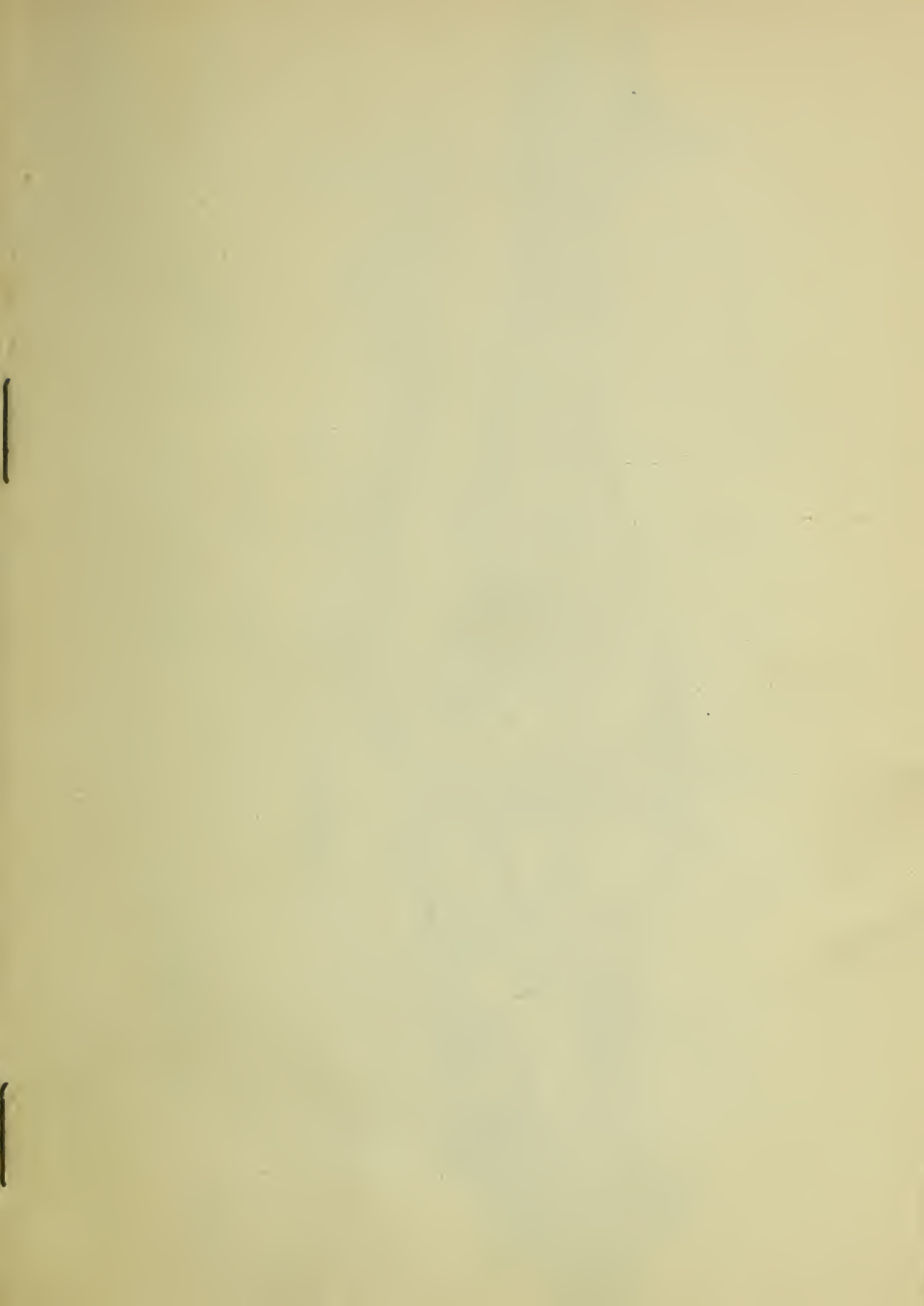
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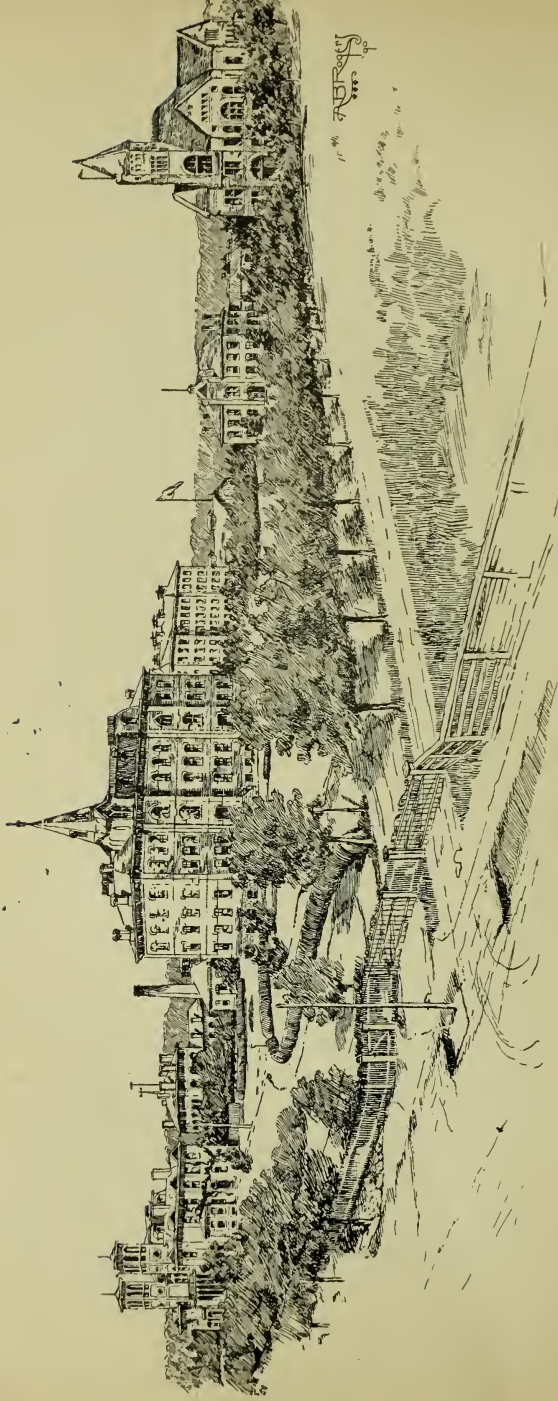


Catalogue for 1896-97

Announcement for 1897-98

1896-97





Art Hall.

Engine House.
Pharmacy Building.

PURDUE UNIVERSITY CAMPUS.

University Hall.

Men's Dormitory.

Armory.

Science Hall.

Electrical Building.

PURDUE UNIVERSITY

FOURTEENTH ANNUAL
...ANNOUNCEMENT...

OF THE

School of Pharmacy

1897-98

INDIANAPOLIS :

Wm. B. Burford, Contractor for State Printing and Binding

1897

BOARD OF TRUSTEES.

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CALENDAR 1897-98.

1897.

Entrance examination....	Tuesday, September 14, 9 A. M.
First term begins	Wednesday, September 15, 10:15 A. M.
Thanksgiving recess—	
From	Wednesday, November 24, 12 M.
To.....	Tuesday, November 30, 8:15 A. M.
First term ends.....	Wednesday, December 22, 4:30 P. M.

1898.

Second term begins	Tuesday, January 4, 10:15 A. M.
State examination	Thursday, March 24, 9 A. M.
Second term ends.....	Friday, March 25, 4:30 P. M.
Third term begins	Monday, March 28, 8:15 A. M.
Course I ends.....	Wednesday, March 30.
Third term ends.....	Tuesday, June 7, 4:30 P. M.
General Commencement..	Wednesday, June 8.

FACULTY.

JAMES H. SMART, A. M., LL. D.,
President of the University.

ARTHUR L. GREEN, PH. C., M. D., PH. D.
Dean and Professor of Chemistry.

STANLEY COULTER, PH. D.,
Professor of Biology.

JULIUS W. STURMER, PH. G.,
Professor of Pharmacy.

GEORGE SPITZER, PH. G.,
Lecturer on Operative Pharmacy.

BENJAMIN M. HOAK, PH. G.,
Instructor in Materia Medica.

KATHERINE E. GOLDEN, M. S.,
Instructor in Botany.

SEVERANCE BURRAGE, B. S.,
Instructor in Sanitary Science.

CLARENCE M. McKELLIPS, PH. G., PH. C.,
Assistant in Chemistry.

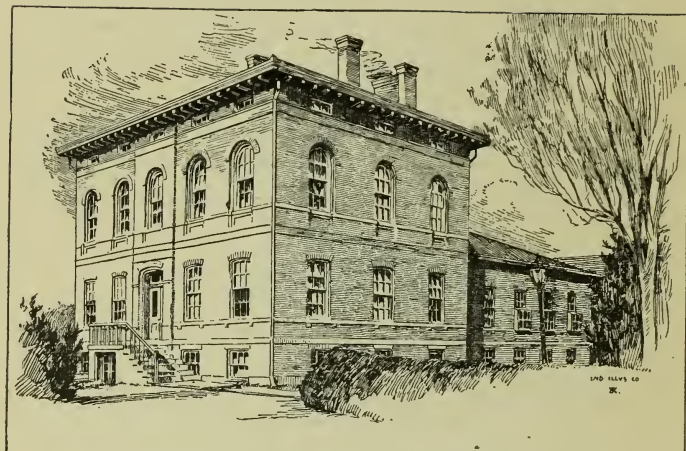
CHARLES E. VANDERKLEED, PH. G., PH. C.,
Student-Assistant in Chemistry.

GEORGE D. PARKS,
Special Lecturer on Pharmaceutical Jurisprudence.

JAMES D. HILLIS, M. D.,
Special Lecturer on Electro-Therapeutics.

STATE EXAMINERS.

JOSEPH R. PERRYIndianapolis.
WILLIAM F. RANKEFt. Wayne.
HARRY GLICKLaFayette.



PHARMACEUTICAL LABORATORY.

GENERAL STATEMENT.

PURDUE UNIVERSITY is the State Institution of Technology. It is supported by legislative appropriations and by the proceeds of an endowment fund granted by the General Government. It derives its name through legislative enactment from John Purdue, who gave to the State for the use of the Institution one hundred and fifty thousand dollars. It has a permanent endowment fund to the amount of three hundred and forty thousand dollars, and other non-productive property in buildings, lands and equipment to the value of four hundred and forty thousand dollars, and an annual income from State appropriations and U. S. Government appropriations. It has one hundred and eighty acres of land in its campus and farm, fifteen buildings, well equipped laboratories, shops, museums, library and reading rooms.

The Institution embraces six special schools, including one which affords a thorough and practical training in pharmacy. This School of Pharmacy also offers excellent training for those

who expect to engage in chemical pursuits, or to enter the laboratory of a manufacturing pharmacist or chemist. The instruction also constitutes a good preparatory course for those who anticipate attending a school of medicine.

The student is engaged at the University about six hours each day. Two thirds of this time is devoted to laboratory work, and one-third to lectures and recitations. There are neither lectures, recitations nor quizzes in the evening, that time being allotted to home-study and preparation for the ensuing day's work. The student has, therefore, no time for clerking in a drug store, and must devote his undivided time and energy to his school work. Special attention is called to the large amount of required laboratory work, and comparison is solicited with other schools of pharmacy on this point.

A complete catalogue of the University will be sent on application.

All correspondence relating to the School of Pharmacy should be addressed to

ARTHUR L. GREEN,
Dean of Purdue School of Pharmacy,
LaFayette, Ind.

COURSES OF STUDY.

Purdue University offers the following courses of study in the School of Pharmacy :

COURSE I. Two years of twenty six weeks each, leading to the degree of Graduate in Pharmacy. For a description of this course see below.

COURSE II. Two years of thirty-six weeks each, leading to the degree of Pharmaceutical Chemist. See page 13.

COURSE III. Four years of thirty-six weeks each, leading to the degree of Bachelor of Science in Pharmacy. See page 15.

COURSE I.

DEGREE GIVEN.

Graduate in Pharmacy.

LENGTH OF COURSE.

Two years of twenty-six weeks each. The next year opens Wednesday, September 15, 1897, and closes Wednesday, March 30, 1898. Each year is divided into two terms.

REQUIREMENTS FOR ADMISSION.

Candidates for admission must have a good knowledge of the common English branches. In arithmetic special familiarity with denominate numbers, fractions, percentage, and proportion will be required. Examination for applicants will be held Tuesday, September 14, at 9 A. M.

Those presenting satisfactory certificates of proficiency are exempt from entrance examinations. No experience in a drug store is required.

OUTLINE OF REQUIRED STUDIES IN COURSE I.

FIRST YEAR.		No. of Hours in Lecture Room.	No. of Hours in Laboratory.
1. <i>Chemical and Pharmaceutical Processes.</i> See page 18	28	84	
2. <i>Inorganic Qualitative Analysis.</i> See page 26	66	198	
3. <i>Physiology.</i> See page 29	26	...	
4. <i>Therapeutics and Doses.</i> See page 24.....	26	...	
5. <i>Pharmacognosy.</i> See page 23	..	52	
6. <i>Pharmacopœial Nomenclature.</i> See page 18.....	28	...	
7. <i>Organic Chemistry.</i> See page 27	24	...	
8. <i>Galenical and Extemporaneous Preparations.</i> See page 18	24	72	
9. <i>Quantitative Analysis.</i> See page 26.....	12	36	
Total hours for the year	234	442	
Average per week.....	26		

SECOND YEAR.			No. of Hours in Lecture Room.	No. of Hours in Laboratory.
1.	<i>Inorganic Preparations.</i>	See page 20.....	24	72
2.	<i>Prescription Work.</i>	See page 23	26	78
3.	<i>Therapeutics.</i>	See page 24	26	...
4.	<i>Botany.</i>	See page 29	8	40
5.	<i>Advanced Pharmacognosy.</i>	See page 24	..	26
6.	<i>Pharmaceutical Analysis.</i>	See page 21.....	38	114
7.	<i>Chemistry and Materia Medica.</i>	See page 27... ..	78	...
8.	<i>Organic Pharmaceutical Preparations.</i>	See page 20	18	54
9.	<i>Operative Pharmacy.</i>	See page 21.....	36	108
10.	<i>Toxicology.</i>	See page 28	14	42
11.	<i>Analysis of Urine.</i>	See page 28.....	..	48
12.	<i>State Examination.</i>	See page 25	..	...
Total hours for the year			268	582
Average per week			33	

TEXT-BOOKS.

Students will find it to their advantage to purchase all text-books (with the exception of perhaps the U. S. Pharmacopœia for the first year, and the U. S. Dispensatory for the second year) after arrival.

The following text-books (latest editions) will be used:

First Year.—

Coblenz's Handbook of Pharmacy.

U. S. Pharmacopœia.

Green's Notes on Chemistry.

Second Year.—

U. S. Dispensatory.

Newth's Inorganic Chemistry.

Warner's Therapeutics.

EXPENSES.

The expenses are far less than in the majority of similar schools, while unusual facilities are afforded for laboratory practice.

The fees, which are payable in advance, are as follows:

FIRST TERM.

Entrance fee	\$5 00
Incidentals.....	5 00
Chemicals.....	14 00

SECOND TERM.

Incidentals.....	\$5 00
Chemicals.....	14 00

There will also be charges for breakage and for such chemicals as may be required in unusual quantities. To cover such expenses, a laboratory deposit of \$15.00 is required at the time of admission. From \$8.00 to \$10.00 of this deposit is usually returned to the student at the end of the year.

No extra fees are required of students who come from other States.

Good board may be had for \$2.50 a week, and by clubbing together students can reduce board to about \$2.00 or \$2.25. Furnished rooms can be had for about 75 cents per week, when two students room together.

The total expense of board, room rent, fuel, fees, books and laundry for twenty-six weeks need not exceed \$155. Students of the School of Pharmacy must provide their own rooms, as they can not be accommodated in the college dormitory.

A fee of \$5.00 will be required for the diploma, and should be paid before commencement week.

COURSE II.

DEGREE GIVEN.

Pharmaceutical Chemist.

LENGTH OF COURSE.

Two years of thirty-six weeks each. The next year opens Wednesday, September 15, 1897, and closes June 7, 1898. Each year is divided into three terms, the first and second of which are identical with the first and second terms of Course I.

REQUIREMENTS FOR ADMISSION.

Students who have shown proficiency in the completion of the first year of Course I may enter Course II at the beginning of the third term.

OUTLINE OF REQUIRED STUDIES IN COURSE II.

[The first and second terms of each year are identical with the first and second terms of each year in Course I.]

FIRST YEAR—THIRD TERM.

1. *Organic Preparations*, see page 19.
2. *Water Analysis*, see page 27.
3. *Field Work in Botany*, see page 29.
4. *Chemistry of Foods*, see page 27.
5. *Photography*, see page 25.

SECOND YEAR—THIRD TERM.

1. *Pharmaceutical Literature*, see page 25.
2. *Food Analysis*, see page 28.
3. *Pharmaceutical Jurisprudence*, see page 25.
4. *Theoretical Chemistry*, see page 29.
5. *Electro-Therapeutics*, see page 24.
6. *Micro-Botany*, see page 30.
7. *Bacteriology*, see page 30.
8. *Thesis*, see page 25.

EXPENSES.

In addition to the fees specified for Course I, on page 12, the student is required to make a breakage deposit of \$5.00 at the beginning of the third term of each year. A fee of \$5.00 will be required for the diploma.

COURSE III.

DEGREE GIVEN.

Bachelor of Science in Pharmacy.

LENGTH OF COURSE.

Four years of thirty-six weeks each. The next year opens Wednesday, September 15, 1897.

REQUIREMENTS FOR ADMISSION.

These are stated in detail on page 129 of the general catalogue of the University. This catalogue will be furnished on application.

OUTLINE OF REQUIRED STUDIES IN COURSE III.

FRESHMAN YEAR.

[Identical with the Freshman year in the School of Applied Science.]

1. *Mathematics.* See page 30.
2. *Composition, Rhetoric, and Literature.* See English, page 30.
3. *German.* See, page 30.
4. *French.* See page 30.
5. *Drawing.* See page 30.
6. *Introductory Botany.* See page 30.
7. *Introductory Chemistry.* See page 30.
8. *Military Drill.* See page 30.

SOPHOMORE YEAR.

1. *Inorganic Qualitative Analysis.* See page 26.
2. *General Biology.* See page 30.
3. *Physics.* See page 30.
4. *German.* See page 30.
5. *Quantitative Analysis.* See page 26.
6. *Photography.* See page 25.
7. *Water Analysis.* See page 27.
8. *Military Drill.* See page 30.

JUNIOR YEAR.

1. *Chemical and Pharmaceutical Processes.* See page 18.
2. *Physiology.* See page 29.
3. *Therapeutics and Doses.* See page 24.
4. *Pharmacognosy.* See page 23.
5. *Pharmacopœial Nomenclature.* See page 18.
6. *Organic Chemistry.* See page 27.
7. *Galenical and Extemporaneous Preparations.* See page 18.
8. *English Prose.* See page 30.
9. *History.* See page 30.
10. *Physics.* See page 30.
11. *Organic Preparations.* See page 19.
12. *Field Work in Botany.* See page 29.
13. *Chemistry of Foods.* See page 27.

SENIOR YEAR.

The instruction for this year includes:

1. All the studies in the second year of Course I, see page 11.
2. All the studies in the third term of the second year of Course II (see page 14) with the exception that Geology (see page 30) is taken in the place of Theoretical Chemistry.

EXPENSES.

Entrance fee per annum.....	\$5 00
Incidental fee per annum	10 00

Laboratory and library fees, per annum--

Freshman.....	12 00
Sophomore.....	16 00
Junior.....	20 00
Senior.....	28 00

One-half of the incidental fee and one-half of the laboratory and library fee are payable at the beginning of the first term, and one-half at the beginning of the second term.

Laboratory fees cover expenses for drawing paper, chemicals, and all other laboratory material used by students, and for the use of microscopes and other apparatus. Students taking Chemistry are required to deposit five dollars a term to cover breakage and use of apparatus.

DESCRIPTION OF THE STUDIES OFFERED IN THE THREE COURSES IN THE SCHOOL OF PHARMACY.

All subjects marked thus (*) constitute Course I.

PHARMACY.

Chemical and Pharmaceutical Processes.*

Class Work, 28 Hours. Laboratory Work, 84 Hours.

Lectures and recitations on systems of weights and measures, specific gravity and its practical utility; on heat, its generation, its measurement and its use in pharmacy; on the various processes and manipulations which find application in pharmaceutical practice, as, comminution, solution, filtration, evaporation, precipitation, crystallization and percolation.

Pharmacopoeial Nomenclature.*

Class Work, 28 Hours.

Recitations on the Latin words used in pharmacy, with special reference to the Latin titles of the U. S. Pharmacopœia.

Galenical and Extemporaneous Preparations.*

Class Work, 24 Hours.

The official, and the important unofficial galenical and extemporaneous preparations will be subjected to systematic study. The working formulas for the manufacture of the preparations will be given; the various methods will be criticised, and the merits and

demerits of each pointed out to the student. Special attention will be given to the chemistry involved.

Laboratory Work, 72 Hours.

In the laboratory each student will make, independently, though under the personal supervision of the instructor, the following preparations:

Medicated waters.	Extracts.
Solutions.	Masses.
Syrups.	Glycerites.
Elixirs.	Confections.
Infusions.	Honeys.
Decoctions.	Powders.
Vinegars.	Oleates.
Tinctures.	Ointments.
Fluid extracts.	Cerates.
Soluble extracts.	Plasters.
Spirits.	Pills.
Mucilages.	Capsules.
Mixtures.	Troches.
Liniments.	Suppositories.
Emulsions.	

This, like all the laboratory work in the course, is obligatory; but students who have had much experience and acquired special skill in manufacturing will be excused from part or all of the above and provided with advanced work.

Organic Preparations.

Class Work, 20 Hours. Laboratory Work, 60 Hours.

This work consists in the preparations of organic compounds, the student following as nearly as possible the industrial processes of preparation.

Inorganic Preparations.**Class Work, 24 Hours.*

Instruction is given in the manufacture of the inorganic substances used in medicine. Due consideration is also given to the metallurgy of iron, steel, gold, silver, lead, tin, copper and the other metals of commercial importance.

Laboratory Work, 72 Hours.

Among other compounds, each student, independently, prepares the following:

Yellow Mercuric Oxide,	Zinc Chloride,
Red Mercuric Oxide,	Mercurous Chloride,
Mercuric Chloride,	Calcium Chloride,
Mercuric Subsulphate,	Ferric Chloride,
Mercurous Iodide,	Zinc Bromide,
Lead Acetate,	Ammonium Bromide,
Lead Oxide,	Bismuth Subnitrate,
Ammonium Hydroxide,	Silver Nitrate,
Ferric Hydroxide,	Sodium Pyrophosphate,
Ferric Hydroxide with Magnesia,	Potassium Chlorate,
Lead Acetate,	Calcium Hypophosphite,
Calcium Carbonate,	Ferrous Sulphate,
Manganese Sulphate,	Ferric Sulphate,
Heavy Magnesium Carbonate,	Zinc Sulphate,
Light Magnesium Carbonate,	Copper Sulphate,
Magnesium Oxide,	Precipitated Sulphur,
Zinc Carbonate,	Boric Acid,
Aluminum Hydroxide,	Hydrochloric Acid.

Organic Pharmaceutical Preparations.**Class Work, 18 Hours.*

In Manufacturing Chemistry and Pharmacy the class work consists in the dictations of the laboratory work, and in explaining to the student the reasons for the different steps in the processes of manufacture.

Laboratory Work, 54 Hours.

The student prepares such compounds as, chloroform, ether, iodoform, acetanilid, citrate of iron, tartrate of iron and potassium, pyrophosphate of iron, and artificial oil of wintergreen.

Operative Pharmacy.**Class Work, 36 Hours.*

(a) Lectures and recitations on the galenical and extemporaneous preparations of the U. S. Pharmacopœia. The official processes will be commented upon. The reason for their various steps, as well as certain deviations from common methods, will be made the subject of class discussions.

(b) Lectures and recitations on the newer classes of remedies and pharmaceutical preparations: gelatine-coated pills, sugar-coated pills, soft capsules, cachets, compressed tablets, tablet triturates, pastiles, lozenges, bougies, plasmas, surgical dressings, etc., etc.

(c) Lectures on elegant pharmaceuticals, toilet preparations, family medicines, etc.

Laboratory Work, 108 Hours.

(a) The manufacture of certain galenical preparations.

(b) The manufacture of cachets, soft capsules, compressed tablets, tablet triturates, effervescent salts, etc.

(c) The manufacture of elegant pharmaceuticals, toilet articles and similar preparations.

Pharmaceutical Analysis.* (Inorganic and Organic.)*Class Work, 38 Hours.*

(a) Continuation of first year work in Inorganic Qualitative Analysis, with special reference to testing for impurities in inorganic chemicals, according to the U. S. Pharmacopœia.

(b) Lectures and recitations on methods for separation and identification of the more important organic compounds. Verifi-

cation of the purity of organic substances, according to the requirements of the U. S. Pharmacopœia, will be made a feature of the work.

(c) Lectures and recitations on the Quantitative estimation of chemicals and preparations, by both gravimetric and volumetric methods. The quantitative operations of the U. S. Pharmacopœia will be given special prominence in this work.

(d) Lectures and recitations on Pharmaceutical Assaying, which consists in the quantitative estimation of the active constituents in crude drugs and pharmacopœial preparations. This work familiarizes the student with the various standard methods of assaying.

Laboratory Work, 114 Hours.

(a) Separation and identification of inorganic compounds, together with the identification of impurities in chemicals that fail to fulfill the pharmacopœial requirements for purity.

(b) Separation and identification of such compounds as benzine, alcohol, chloroform, glycerin, glucose, sucrose, chloral hydrate, tannic, gallic, tartaric, benzoic and salicylic acids, quinine, strychnine, morphine, and caffeine. The pharmacopœial tests for impurities in these substances are also carefully made, the practice being of great value to the student in a commercial way.

(c) Laboratory work in specific gravity and melting point determinations; gravimetric determinations of iron, aluminum, zinc, calcium, magnesium, sulphuric acid, hydrochloric acid, phosphoric acid, etc.; volumetric determinations by saturation, precipitation, oxidation and reduction; gasometric analysis; quantitative determinations of the U. S. Pharmacopœia.

(d) Estimation of the active constituents of cinchona, opium, nux vomica, aconite, belladonna, guarana, ipecac, podophyllum, three fluid extracts, one pill mass, one scale salt; also the determination of the amount of alcohol and glycerin in galenical preparations.

Prescription Work.**Class Work, 26 Hours.*

Lectures and recitations on the prescription, and on incompatibilities. Also a drill in Latin, with reading, interpreting, and correcting of Latin prescriptions.

Special attention is paid throughout the year to doses, solubility of chemicals, and to the composition of pharmaceutical preparations.

Laboratory Work, 78 Hours.

In the dispensing laboratory students experiment with incompatible mixtures, thereby becoming familiar with the difficulties commonly met with at the prescription counter, and learning how best to overcome them. They fill numerous prescriptions taken from the files of drug stores, besides many typical ones furnished by the instructor.

The acquisition of manipulative skill—skill in measuring, weighing, powder folding, pill rolling, capsule filling, etc.—constitutes a prominent feature of this work.

Before entering upon prescription work, students are required to pass a review examination on doses of drugs and the percentage composition of their preparations. This examination will be held at the beginning of the second year.

Pharmacognosy.* (The Recognition of Chemicals and Drugs.)*Laboratory Work, 52 Hours.*

The student will be taught to identify chemicals, crude vegetable and animal drugs, and pharmaceutical preparations by physical characteristics—appearance, taste, and color. He will also receive a thorough drill on their Latin and English names, with spelling and pronunciation. History and habitat will be given whenever of practical importance.

These studies will be pursued by the class in sections, so that each student can receive the benefit of individual instruction.

Advanced Pharmacognosy.**Laboratory Work, 26 Hours.*

This is a continuation of the subject of recognition of chemicals and drugs.

THERAPEUTICS.***Therapeutics and Doses.*****Class Work, 26 Hours.*

(a.) Medicines are classified according to their therapeutical uses. The different classes are defined and arranged in a manner which will facilitate their study.

(b.) In connection with learning the therapeutical uses of medicines, the student will learn the quantities in which these medicines are administered. A carefully prepared *dose-table* is given. In this table medicines are grouped in a manner which will enable the student to memorize them with comparative facility.

Therapeutics.**Class Work, 26 Hours.*

The more important drugs, like opium, cinchona, belladonna, etc., will be taken up separately and their physiological action and therapeutical use more fully studied.

Lectures will be given on poisons and antidotes.

Electro-Therapeutics.*Class Work, 10 Hours.*

Lectures on the treatment of diseases by means of electricity. Practical demonstrations in the use of x-rays in surgery will also be given.

PHOTOGRAPHY.

Class and Laboratory Work, 40 Hours.

The student will have practice in dry-plate, in wet-plate, and in ferro-type work; in enlarging and reducing; and in micro-photography.

PHARMACEUTICAL JURISPRUDENCE.

Class Work, 10 Hours.

Lectures on the legal duties and liabilities of a druggist.

ORIGINAL WORK.

Thesis.

Laboratory Work, 90 Hours.

Experimentation with the view of obtaining new data of value in manufacturing pharmacy, or in the identification or valuation of pharmaceutical products.

Pharmaceutical Literature.

Work, 30 Hours.

Original articles in pharmaceutical and chemical journals will be made the subject of study and class discussion.

STATE EXAMINATION.*

Chemistry, Pharmacy, and Materia Medica.

This examination is conducted by the Committee on Education of the Indiana Pharmaceutical Association, and will be held Thursday, March 24, 1898.

CHEMISTRY.

Inorganic Qualitative Analysis.*

Class Work, 66 Hours.

Students learn thoroughly the scientific names and chemical formulæ of the various inorganic compounds—hydroxides, oxides, acids, and salts. Rules are committed on precipitation and on solubility. These rules are of great value, not merely in analytical work, but also in prescription work, where they aid the student in the study of the incompatibilities of inorganic substances. The general process for the detection of acids and bases is committed by the student. He is also taught to write the equation for each chemical reaction.

Laboratory Work, 198 Hours.

In the laboratory the student verifies the rules on precipitation and solubility; he becomes thoroughly familiar with the chemical behavior of the various acids and bases; he repeatedly works through a scheme of separation and identification of the acids and bases; he then subjects individual unknowns (mixtures of inorganic compounds) to a qualitative examination, and reports his results to the instructor.

Quantitative Analysis—Introductory Work.*

Class and Laboratory Work, 48 Hours.

Lectures on the underlying principles of gravimetric and volumetric analysis, with laboratory work to verify and illustrate the same. In the laboratory the student becomes familiar with quantitative operations in determining moisture, ash in filter paper, lead, iron, and sulphuric acid, by gravimetric processes; and sulphuric acid, sodium carbonate, and ammonia, by volumetric methods.

Organic Chemistry.**Class Work, 24 Hours.*

Lectures and recitations on carbon compounds; their classification, structural formulæ, etc. These lectures and recitations are merely preparatory to subsequent work in this subject.

The Chemistry of Foods.*Class Work, 20 Hours.*

Lectures on the composition of foods, including also the chemistry of cooking.

Water Analysis. (Sanitary and Mineral.)*Class Work, 30 Hours.*

Lectures on the classification and composition of natural waters, methods of analysis, and interpretation of results.

Laboratory Work, 90 Hours.

Each student will subject two samples of water to mineral analysis, and five samples of drinking water to sanitary analysis.

Chemistry and Materia Medica.**Class Work, 78 Hours.*

Lectures and recitations as follows:

(a) Inorganic Chemistry, with special reference to the practical applications of the subject.

(b) Organic Chemistry. A treatment of hydrocarbons, alcohols, ethers, ethereal salts, organic acids, carbohydrates and other classes of organic compounds; on fermentation products, petroleum products, natural and artificial gas, aniline dyes, synthetically prepared new remedies; plant constituents, viz.: starches, sugars, gums, resins, fixed oils, volatile oils, oleo resins, gum

resins, balsams, organic acids, glucosides, alkaloids, etc., their source, chemical composition, solubility and use.

The artificially prepared organic compounds which find application in medicine or in pharmacy will be similarly treated.

(c) Organic Materia Medica. The crude organic drugs will be classified according to their principal constituents, and studied in the following order: Drugs containing: (1) starches and gums, (2) sugars, (3) fixed oils, (4) volatile oils, (5) resins, (6) gum-resins, oleo-resins and balsams, (7) organic acids, (8) tannins, (9) glucosides and neutral principles, (10) alkaloids.

Toxicology.*

Class Work, 14 Hours. Laboratory Work, 42 Hours.

Laboratory work consists in the detection of the more common organic and inorganic poisons in presence of other organic material. The student will work on poisoned foods, separating and identifying the poisons.

Analysis of Urine.*

Laboratory Work, 48 Hours.

Instruction is given on the composition of urine; on abnormal constituents and their pathological indications.

Laboratory work consists in the chemical and microscopical examination of normal and abnormal urine. The student is furnished with natural (not artificial) samples, obtained through resident physicians.

Food Analysis.

Class Work, 20 Hours.

Lectures on methods of food analysis and the detection of impurities and adulterations.

Laboratory Work, 60 Hours.

The student analyses, and tests for adulteration, such foods as milk, butter, cheese, sugar, and vinegar. The sugar analysis includes polariscopic determinations.

Theoretical Chemistry.*Class Work, 30 Hours.*

Recitations on the fundamental principles of chemistry, including also the historical development of the science of chemistry.

BIOLOGY.**Physiology.****Class Work, 26 Hours.*

The instruction in this subject comprises a description of the organs of the body, with a brief discussion of their functions and the influences exerted on the same by external conditions. The principal object is to prepare the student for the study of therapeutics.

Field Work in Botany.*Class and Laboratory Work, 40 Hours.*

This work consists in the collection and study of an herbarium of medicinal plants.

Botany.**Class Work, 8 Hours.*

Lectures: Treating of the embryo, germination, with its conditions and phenomena, structure and functions of the parts of the plant body, assimilation, respiration, growth, irritability, movements, and fertilization.

Laboratory Work, 40 Hours.

- (a) A careful study of the compound microscope and its appliances, together with practice in mounting, sectioning, etc.
- (b) A study of the various tissues and tissue elements.
- (c) A study of the gross anatomy of typical plants.

Micro-Botany.*Laboratory Work, 40 Hours.*

In the detection of adulteration in powdered vegetable drugs.

Bacteriology.*Class and Laboratory Work, 40 Hours.*

This work is designed to familiarize the student with the usual methods of bacteriological work, special attention being given to the examination of water, sewage, ice and milk, and also to the identification of pathogenic forms, such as *Bacillus tuberculosis* in sputum and the diphtheria bacillus in diseased throats.

GENERAL SUBJECTS TAKEN ONLY IN COURSE III.

(Figures refer to pages in general catalogue of the University.)

Introductory Botany	p. 99.
Introductory Chemistry	p. 105.
General Biology	p. 99.
Physics	Lectures, p. 109; Practical Physics, p. 109.
Mathematics	of Freshman year, p. 120.
English	Composition, Rhetoric, Literature, English Prose, p. 117.
German	of Freshman and Sophomore years, p. 121.
French	of Freshman year, p. 122.
Drawing	Freehand Drawing, p. 111.
History	General History of Junior year, p. 118.
Geology	p. 97.
Military Drill	p. 141.

STUDENTS 1896-97.

COURSE I.

FIRST-YEAR.

OSCAR E. ANDERSON.....	Linn Grove.
HENRY J. ANDREW	Laporte.
THOMAS H. BATTLE.....	Butler, Ga.
GEORGE L. BERRY	Terre Haute.
JAY L. BITTLE.....	Wingate.
CHARLES L. BOWLIN	Tipton.
EDGAR K. BRASELTON.....	Princeton.
ERNEST E. BROCKMAN	Mt. Sterling, Ill.
DEWITT G. BROWN.....	Crescent City Ill.
ELMER R. BURGIN	Royalton.
JOHN T. BUTLER.....	Knightstown.
ROBERT H. CALDWELL	LaFayette.
THOMAS H. CLOSE.....	Little York.
JOHN W. CONNOR	LaFayette.
EARL H. COSNER	Greencastle.
EDWARD L. FIESER	Rochester.
JOHN A. GARRETTSON	Terre Haute.
FRANK P. GIBSON.....	Louisville, Ky.
FLOYD A. GRESHAM.....	Delphi.
GEORGE W. HAVENS	Rushville.
JOHN T. HOGAN	LaFayette.
ARTHUR L. JOHNSON.....	Bourbon.
FRED. C. KAPPUS	New Washington, Ohio.
WARREN M. KNAPP.....	Cambria.

WILLIAM J. LENTZ.....	Roann.
WILLIAM LEWIS	Sadorus, Ill.
EUGENE D. LUKE.....	Elkhart.
CHARLES R. LUSK	Bluffton.
OTTO LIENKAEMPER	Franklin, Wis.
WILLIAM J. MARNEY	Indianapolis.
LEOPOLD A. MATTES	South Bend.
F. W. H. MEINZEN	Ft. Wayne.
FRANKLIN W. MILLER.....	Whitaker.
GUY B. MILLER	Bluffton.
W. H. O. MINTER	Indianapolis.
JUDSON D. MOSCHELLE.....	Indianapolis.
SIEGMAR MÜHL	Indianapolis.
CLYDE McCARTY	Gosport.
AUGUSTUS McMILLAN.....	West LaFayette.
CHARLES B. PETTIBONE	Farmington, Mich.
CLARENCE S. PRENTISS	Quincy, Mich.
WILLIAM M. PURDY	Morocco.
FRED. R. ROBINSON.....	Attica.
EDWARD L. RUDIG.....	North Manchester.
J. W. MILLER SCHMITT	LaFayette.
FREDERICK W. STELLHORN.....	Ft. Wayne.
JAMES M. VICKREY.....	Whitaker.
HENRY B. VOGES	Terre Haute.
FRED H. VOGT	Indianapolis.
CHARLES A. WARREN.....	Watseka, Ill.
ROBERT WEBER	Ft. Wayne.
LEE WILE	Rochester.
JOHN W. WININGS.....	Indianapolis.

SECOND-YEAR.

EDMUND B. BERNARD	Bridgeport, Ill.
HENRY M. BENTLY.....	Sadorus, Ill.
HARRY J. BORST	Indianapolis.
CHARLES B. CRISS.....	Gosport.
CARMI S. CUNNINGHAM.....	Troy.

VINCENT A. DITTOE	Ft. Wayne.
FRANK E. EHLE	Bluffton.
FRANK R. ELDRED	Ligonier.
HUGH GRIBBON	Roann.
ADOLPH F. KLUTH	LaFayette.
AUGUST KOEHN	Ft. Wayne.
LOUIS A. KRAMER	Ft. Wayne.
HENRY J. LINDEMAN	Troy.
THOMAS W. McCAULEY	LaFayette.
JOHN W. MCKENZIE	River John, Nova Scotia.
HARRY G. NORWOOD	Lebanon.
GEORGE J. NUSSBAUM	Ft. Wayne.
MISS DELPHA OREM	Bennington.
JOSEPH O. PERKINS	Greencastle.
GILBERT M. PHARES	Sheridan.
OSEE A. RENAHAN	Cosperville.
FRANK A. ROESENER	Indianapolis.
OSCAR E. RUSSELL	Tipton.
ROBERT B. SPRING	LaFayette.
CHARLES W. STARZ	Delevan, Ill.
WILL C. STURGIS	Bluffton.
ALBERT J. THOMPSON	Nicholson, N. C.
EARL P. WAGNER	South Bend.
CARL C. WEISS	Indianapolis.
FRED. R. WIDMER	Dayton.
JESSE E. WILSON	Indianapolis.
OMAR S. WUTHRICH	Seybert.
ALBERT E. YEAGER	Topeka.

COURSE II.

FIRST-YEAR.

ERNEST E. BROCKMAN	Mt. Sterling, Ill.
DEWITT G. BROWN	Crescent City, Ill.
JOHN A. GARRETTSON	Terre Haute.
WARREN M. KNAPP	Cambria.

LEOPOLD A. MATTES	South Bend.
W. H. O. MINTER.....	Indianapolis.
JUDSON D. MOSCHELLE.....	Indianapolis.
AUGUSTUS McMILLAN	West LaFayette.
CHARLES B. PETTIBONE.....	Farmington, Mich.
CLARENCE S. PRENTISS	Quincy, Mich.
HENRY B. VOGES.....	Terre Haute.
CHARLES A. WARREN.....	Watseka, Ill.

SECOND YEAR.

EDMUND B. BARNARD.....	Bridgeport, Ill.
HENRY M. BENTLEY.....	Sadorus, Ill.
HARRY A. BIRK.....	Indianapolis.
FRANK E. EHLE.....	Bluffton.
FRANK R. ELDRED	Ligonier.
JOHN W. MCKENZIE.....	River John, Nova Scotia.
WILL C. STURGIS	Bluffton.
EARL P. WAGNER	South Bend.
CARL C. WEISS.....	Indianapolis.

COURSE III.

SOPHOMORE YEAR.

EARL A. MEANS.....	Shelbyville.
CHARLES E. VANDERKLEED	West LaFayette.

JUNIOR YEAR.

CHASE WOOD.....	Winamac.
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SUMMARY.**COURSE I.**

First year.....	53	
Second year.....	33	
Total.....		86

COURSE II.

First year.....	12	
Second year.....	9	
Total.....		21

COURSE III.

Sophomore year.....	2	
Junior year.....	1	
Total.....		3
Students counted twice.....		110
Total students in School of Pharmacy.....		20
Total students in School of Pharmacy.....		90

ALUMNI.

With the Degree of Doctor of Pharmacy.

JOHN N. HURTY, M. D., pharmacist and analytical chemist, 102 North Pennsylvania Street, Indianapolis, Ind.; Professor of Chemistry and Metallurgy in Indiana Dental College; Lecturer on Hygiene in Indiana Medical College; and Secretary State Board of Health.

GEORGE W. SLOAN, M. D., President Sloan Drug Co., 22 West Washington Street, Indianapolis, Ind.; President of the American Pharmaceutical Association, 1879-1880; Lecturer on Pharmacy in Indiana Medical College.

JOSEPH R. PERRY, M. D., pharmacist, 200 East Washington Street, Indianapolis, Ind.; Professor of Pharmacy in the American Medical College.

With the Degree of Graduate in Pharmacy.

1886.

ERNEST G. EBERHARDT, analytical chemist for Eli Lilly & Co., Indianapolis, Ind.

MANUEL JAY, physician, Gunnison, Colo.

JOHN KENNEDY, pharmacist in the firm of R. G. Moore & Co., Vincennes, Ind.

EDWIN J. MOWRY, pharmacist, Columbia City, Ind.

LOUIS H. SCHULMEYER, chemist for Daniel Stewart, wholesale druggist, Indianapolis. Address, 725 Capital Avenue N.

BERT D. WESTENFELDER, chemist to the American Oak Leather Co., Cincinnati, Ohio. Address, 247½ Clinton Street.

EMORY J. YEAGER, pharmacist, in the firm of Wells, Yeager & Best Co., LaFayette, Ind.

1887.

MILLARD CALDWELL, pharmacist, in the firm of Krauss & Caldwell, Hartford City, Ind.

WILLIAM H. DICKINSON, treasurer and manager Butler Chemical Co., cor. Armitage and Paulina, Chicago, Ill.

CHARLES L. HACKETT, pharmacist, in the firm of John Hackett & Son., Roanoke, Ind.

WILLIAM M. ROSS, pharmacist, Courtenay, N. Dak.

ALBERT W. SHOUP, physician, Battle Ground, Ind.

1888.

PETER H. FETTERS, Goshen, Ind.

SAMUEL KENNEDY, physician, Shelbyville, Ind.

GEORGE C. MORRISON, pharmacist, South East Street, Indianapolis, Ind.

WILLIAM H. STUDLEY, 352 11th Street, Milwaukee, Wis.

WILLIAM H. VAWTER, pharmacist, in the Vawter-Boggs Drug Co., LaFayette, Ind.

1889.

ADEN L. CAVINS, pharmacist, Bloomfield, Ind.

HENRY H. HARRIS, Boswell, Ind.

LUTHER J. HORD, President of the Oklahoma Board of Pharmacy and pharmacist, Ponca City, Oklahoma.

MERIT POST, 6317 Honore Street, Chicago, Ill.

CHARLES W. SHAFER, pharmacist, Morocco, Ind.

GEORGE SPITZER, Lecturer on Operative Pharmacy, Purdue University, LaFayette, Ind.

CORTICE M. WARNER, Indianapolis, Ind.

DON CARLTON WHITEHEAD, prescription clerk, with W. B. Bryant, 939 Summit, Toledo, Ohio.

1890.

ROBERT W. ALLEN, manager Saxe Pharmacy, 1788 W. Chicago Avenue, Chicago, Ill.

ELDEN BEASLEY, pharmacist, Union, Ind.

MOSES T. BOGGS, pharmacist, in the Vawter-Boggs Drug Co., LaFayette, Ind.

BERT CRITZ, prescription clerk, with Frank Riggs, Marion, Ind.

JOHN E. DUNLAVY, pharmacist in the firm of Dunlavy & Hanna, 123 S. Walnut Street, Muncie, Ind.

WILLIAM E. EASTERDAY, prescription clerk at Some's Pharmacy, northeast corner Sixth and Ohio Streets, Terre Haute, Ind.

JOSEPH L. FEIBLEMAN, traveling salesman, with Daniel Stewart, Indianapolis, Ind. Address, 226 East New York Street.

* GEORGE W. LACEY.

ALVIN H. LEESER, prescription clerk, with A. W. Wilson & Co., 438 W. Madison Street, Chicago, Ill.

HENRY W. MEINZEN, pharmacist, corner Chute and Maumee Avenue, Fort Wayne, Ind.

FRANK RIGGS, pharmacist, Marion, Ind.

FRANK E. SHATTUCK, manufacturing pharmacist, Buntin Drug Co., Terre Haute, Ind.

MARION A. STOUT, pharmacist, Bluffton, Ind.

CHARLES W. WATKINS, prescription clerk, with S. Mühl, corner McLean and Illinois Streets, Indianapolis, Ind.

JOHN M. WESTFALL, dispensing pharmacist, Polyclinic Dispensary, Missouri Medical College, St. Louis, Mo.

1891.

JOSEPH H. ANDERSON, pharmacist, Hull, Iowa.

JONATHAN M. BAUER, in charge of H. H. Flandermeyer's pharmacy, 1156 Superior Street, Cleveland, Ohio.

ISAAC D. BONNETT, pharmacist, in the firm of I. D. Bonnett & Co., Shreve, Ohio.

PAUL D. BROWN, prescription clerk, with Bartlett & Co., LaFayette, Ind.

- CHARLES C. CRAMPTON, physician, Delphi, Ind.
 AUGUST DIEHL, LaFayette, Ind.
 WILLIAM S. GREEN, prescription clerk, with A. Angell, Denver, Colorado.
 WILLIAM J. HART, studying medicine at Missouri Medical College, St. Louis, Mo.
 ALVIN L. HILLS.
 JAMES W. KYLE, pharmacist, Delphi, Ind.
 JOSEPH O. MCCARTY, deceased.
 JOHN S. MAX, pharmacist, Hartville, Mo.
 OSCAR A. MEANS, pharmacist, 1228 Broadway, Logansport, Ind.
 GEORGE C. METZGER, deceased.
 LOUIS W. PLOGSTERTH, Indianapolis, Ind.
 FRED P. PYKE, pharmacist, Anderson, Ind.
 WILDEY F. REYNOLDS, prescription clerk, with Charles W. Eichrodt, corner of Thirtieth and West Streets, Indianapolis, Ind.
 DAVID L. RIFE, Peru, Ind.
 HARRY E. SHARRER, physician, Hammond, Ind.
 JAMES R. SPIVEY, prescription clerk, with C. C. Deam, Bluffton, Ind.
 FRANK O. STABLER, deceased.
 JULIUS W. STURMER, Professor of Pharmacy, Purdue University, LaFayette, Ind.

1892.

- JOSEPH D. BARTLETT, pharmacist in the firm of Bartlett & Co., LaFayette, Ind.
 FRANK M. BEST, pharmacist in the firm of Wells, Yeager & Best Co., LaFayette, Ind.
 JOHN BRIGHT, chemist for the Tilden Co., St. Louis, Mo.
 ALBERT H. CAULKINS, traveling salesman, with Fox & Garhart, Indianapolis, Ind.
 FRANK CAVINS, prescription clerk, with A. L. Cavins, Bloomfield, Ind.
 MISS LOVE E. CRAMPTON, Delphi, Ind.
 GEORGE E. CRAVENS, Bloomfield, Ind.

- JAMES F. FISKE, prescription clerk, with W. R. Dickenson, Lead, South Dakota.
- NATHAN K. GARHART, in the firm of Fox & Garhart, manufacturers of Dental specialties, Indianapolis, Ind.
- L. EDWARD GREEN, prescription clerk, with Trunk Bros., 16th and Freemont Streets, Denver, Col.
- B. FRANKLIN GRIFFITH, pharmacist in the firm of Griffith & Flora, Huntington, Ind.
- MISS NINA B. HART, Boonville, Ind.
- BENJAMIN M. HOAK, instructor in Materia Medica, Purdue University, LaFayette, Ind.
- EDWARD KADEL, manufacturing pharmacist, Bell & Black, Terre Haute, Ind.
- JOHN W. McMAHAN, recently graduated from the College of Physicians and Surgeons, Indianapolis, Ind.
- JOHN H. MILLER, Vincennes, Ind.
- JOHN ROSCOE MUTZ, prescription clerk, with Mutz & Lynch, Edinburg, Ind.
- EMIL REYER, manufacturing chemist for South Bend Medicine Co., South Bend, Ind.
- GEORGE B. SLOAN, secretary and treasurer Sloan Drug Co.; 22 West Washington Street, Indianapolis, Ind.
- FRANK M. THORN, pharmacist in the firm of F. Thorn & Bro., Glen Ellyn, Ill.
- THOMAS A. WEST, prescription clerk, with W. L. Hutchinson & Co., Rockville, Ind.

1893.

- GEORGE W. BATES, pharmacist in the firm of Moore & Bates, Palmyra, Mo.
- JAMES BRADEN, deceased.
- JOSEPH E. CARSON, prescription clerk, with Buckingham & Carter, Brookville, Ind.
- JOHN C. CLARK, prescription clerk, with Mühl & Co., Indianapolis, Ind.

ROWLAND E. CLARK, in the firm of Sweetzer & Clark, Wabash, Ind.

JOSEPH L. CRAMER, pharmacist, Covington, Ohio.

MAYNARD M. ERB, pharmacist in the firm of Erb & McKennan, Connersville, Ind.

J. R. FRANCIS, in the firm of The J. N. Hurty Pharmacy Co.; Demonstrator of Chemistry in the University of Indianapolis, Department of Dentistry; assistant to J. N. Hurty, Analytical Chemist, Indianapolis, Ind.

WALTER L. GERHART, prescription clerk, with W. H. Gerhart, 1232 M Street, Lincoln, Neb.

WALTER E. HARDMAN, physician, Dayton, Ohio.

ISAAC M. HENDERSON, St. Louis, Mo.

GUS HESS, pharmacist, in the firm of Hess & Co., Connersville, Ind.

JUSTUS C. HOUSER, in the firm of The Houser Drug Co., Flat River, Mo.

JACOB A. LONG, manager, European Pharmacy, 349 Wells Street, Chicago.

MISS MYRTLE L. MCMAHAN, Terre Haute, Ind.

LOREN B. MILLER, deceased.

HENRY H. NEAL, Prescott, Ariz.

JOHN H. ROCKWOOD, prescription clerk, with H. Burgess, Goodland, Ind.

JAMES H. WELLINGTON, prescription clerk, with R. G. Rutherford, 180 Myrtle Avenue, Brooklyn, N. Y.

WOOD WILES, prescription clerk, with W. C. Lindley, Bloomington, Ind.

LEONARD D. WORDEN, prescription clerk, with W. F. Peter, Seymour, Ind.

1894.

CHRISTIAN H. ALBERSMEYER, prescription clerk, with Henry W. Meinzen, Fort Wayne, Ind.

WILLIAM N. ARNETT, prescription clerk, with G. C. Fisher, Hill and Columbia avenues, Indianapolis, Ind.

FRANK R. BASS, prescription clerk, with G. W. Bass, Mooresville, Ind.

HARRY T. S. BEST, dispensing pharmacist, at Eastern Indiana Hospital for Insane, Richmond, Ind.

DALLY BLAND, prescription clerk, with T. P. Marshall, Macon, Ga.

FRANK J. BOATMAN, Indianapolis, Ind.

HARVEY A. BURKEE, in the firm of The Elliott Varnish Co., Philadelphia, Pa.

ALEXANDER M. CARTER, Harriman, Tenn.

GEORGE A. CLAPESATTLE, prescription clerk, with Schroeder Bros., Fort Wayne, Ind.

GEORGE C. CULLOM, pharmacist, in the firm of Cullom & Rous, Frankfort, Ind.

EDWIN C. DOWNEY, Albion, Ind.

OLIVER E. DUNN, pharmacist, No. 105 South Washington Street, Crawfordsville, Ind.

FREDERICK H. FLAUGHER, prescription clerk, with Barrow & Hollowell, Bloomington, Ind.

MISS MABEL E. FLEMING, prescription clerk, with Joseph T. Fleming, Princeton, Ind.

WILLIS H. FOX, prescription clerk, with C. A. Fellows, Three Rivers, Mich.

OTTO F. GRAHL, prescription clerk, with B. R. Noll, 128 Broadway, Fort Wayne, Ind.

NORRIS H. HARDING, prescription clerk, with Wilmoth Wilhelm & Co., New Harmony, Ind.

GEO. W. C. HAINES, prescription clerk, with The Hogan Johnson Drug Co., LaFayette, Ind.

LEONIDAS C. HINCHMAN, prescription clerk, with C. H. Schad, 344 East Washington Street, Indianapolis, Ind.

HARRY C. JAMES, prescription clerk, with the Hogan-Johnson Drug Co., LaFayette, Ind.

ORLEY EVERT KENNON, prescription clerk, with A. C. Carver, Winchester, Ind.

J. DILLON KING, prescription clerk, with W. D. Waggoner, No. 1201 Main Street, Terre Haute, Ind.

- WILLIAM F. KIRKHOFF, prescription clerk, with R. Schwegler,
LaFayette, Ind.
- JOHN H. KNEALE, pharmacist, in the firm of Kneale & Kneale,
Brookston, Ind.
- CHARLES O. MAPLE, prescription clerk, with J. F. Blewett,
Bloomington, Ind.
- AMOS M. MARSH, prescription clerk, with Walter Fox, Alexan-
dria Bay, N. Y.
- THOMAS P. MARSHALL, pharmacist, Macon, Ga.
- HENRY M. MEHLIG, studying medicine at Central College of
Physicians and Surgeons, Indianapolis, Ind.
- PERRY M. MURPHY, pharmacist, Princeton, Ind.
- GUSTAVUS A. PETERSDORF, studying medicine at the Indiana
Medical College, Indianapolis, Ind.
- CONRAD SCHROEDER, JR., pharmacist in the firm of Ensminger &
Schroeder, Shelbyville, Ind.
- OLIVER W. STEPHENSON, Livonia, Ind.
- FREDERICK A. STOKES, studying medicine at Central College of
Physicians and Surgeons, Indianapolis, Ind.
- GEORGE H. STOTLER, recently graduated from the Indiana Medi-
cal College, Indianapolis, Ind.
- EDWARD C. TINSLEY, recently graduated from the Louisville
Medical College, Louisville, Ky.
- ALVA I. ULRICH, Three Rivers, Mich.

1895.

- FRANK W. ARTHUR, prescription clerk, with G. O. Carpenter,
Jamestown, Ohio.
- ARRY BALDWIN, prescription clerk, with E. Hawkins & Co.,
Noblesville, Ind.
- HENRY L. BEERMAN, pharmacist, corner Virginia Ave. and Mc-
Carty Street, Indianapolis, Ind.
- ARTHUR BEUKE, prescription clerk, with Meyer Bros., Ft.
Wayne, Ind.

RUDOLPH P. BISCHOFF, pharmacist, in the firm of Rehling & Bischoff, Ft. Wayne, Ind.

WALTER W. BRIGGS, prescription clerk, with G. T. Haan, Grand Rapids, Mich.

JAMES D. BROWN, pharmacist, Burnettsville, Ind.

ARTHUR B. CARR, prescription clerk, at Cox's pharmacy, Seymour, Ind.

CHARLES CHAVIS, prescription clerk, with D. M. Moroney, 142 East Michigan Street, Haughville, Ind.

CASSIUS E. ELLIOTT, pharmacist, Sheridan, Ind.

EDWARD FERGER, prescription clerk, Bates House Pharmacy, Indianapolis, Ind.

GEORGE L. GARVER, Connersville, Ind.

MISS HELENA K. GRAY, studying medicine at the Northwestern Woman's Medical College, Chicago, Ill.

EDWARD H. JACKSON, prescription clerk, with V. H. Early, Greenfield, Ind.

WILLIAM C. JONAS, prescription clerk, with W. R. Smith, Laurel, Ind.

JOHN H. KAPPEL, prescription clerk, with C. L. Rastetter, 305 East Washington Street, Ft. Wayne, Ind.

CORYDON M. KNOWLTON, prescription clerk, with L. C. Davenport, Bluffton, Ind.

MARTIN J. MAUCH, prescription clerk, with L. Burns, Otterbein, Ind.

JOHN L. McCLUNG, Rochester, Ind.

BERT L. McDILL, prescription clerk, with T. R. Thornburg, 190 Fort Wayne Avenue, Indianapolis, Ind.

CLAY F. MEEK, student, Indiana University, Bloomington, Ind.

HUBERT O. MOORE, prescription clerk, with J. R. Perry, 200 East Washington Street, Indianapolis, Ind.

HARRY C. NEWLAND, pharmacist, 90 Fort Wayne Avenue, Indianapolis, Ind.

GEORGE ORF, pharmacist, corner Capitol Avenue and Morris Street, Indianapolis, Ind.

SAMUEL R. PENCE, Frankfort, Ind.

- CHARLES W. REHLING, pharmacist in the firm of Rehling & Bischoff, Fort Wayne, Ind.
- ERNEST A. RICHEY, pharmacist, Richmond, Ind.
- REASON D. SANDERS, prescription clerk, with A. M. Andrews, Connersville, Ind.
- WILLIAM I. SCOTT, studying medicine at the Indiana Medical College, Indianapolis, Ind.
- WILLIAM J. SNODDY, pharmacist, West LaFayette, Ind.
- BENJAMIN B. TAYLOR, prescription clerk, with T. E. Bradshaw, Thorntown, Ind.
- JOHN F. THORNTON, prescription clerk, with Harry Glick, LaFayette, Ind.
- MISS AGNES E. UHL, studying medicine at the Northwestern Woman's Medical College, Chicago, Ill.
- CHARLES E. VANDERKLEED, Student-Assistant in Chemistry, Purdue University, LaFayette, Ind.
- WILLIAM M. WORSHAM, Glenwood, Ind.

1896.

- JOHN W. ALMOND, manager Baughman's Pharmacy, 500 North Alabama Street, Indianapolis, Ind.
- WM. R. BANNON, 206 Daugherty Street, Indianapolis, Ind.
- HARRY A. BIRK, taking advanced work in Purdue School of Pharmacy, LaFayette, Ind.
- J. E. BLINN, prescription clerk, with W. J. Snoddy, West LaFayette, Ind.
- JOSEPH A. DEMMING, prescription clerk, with H. H. Flandermeyer, 493 St. Clair Street, Cleveland, Ohio.
- FRED. H. EBERSHOFF, prescription clerk, with Ashman & Temple, Frankfort, Ind.
- HENRY G. FOEHL, Kendallville, Ind.
- H. E. FREEHAFFER, prescription clerk, with Milton & Eliel, South Bend, Ind.
- JOHN P. FRITZ, pharmacist, 355 Virginia Avenue, Indianapolis, Ind.

- EDWARD R. HACKETT, dispensing pharmacist at the National Military Home, Marion, Ind.
- F. P. HOOPENGARDNER, Ossian, Ind.
- HARRY C. HUNTER, pharmacist, 360 West Main Street, Ft. Wayne, Ind.
- CHARLES E. INCO, prescription clerk, with John Laval & Sons, 220 Main Street, Evansville, Ind.
- DAVID C. JORDAN, Angola, Ind.
- L. B. KING, Olive Hill, Ind.
- E. F. KRATZER, prescription clerk, with H. C. Hunter, 360 West Main Street, Ft. Wayne, Ind.
- EDWARD L. MERTZ, pharmacist, in the firm of Mertz & Co., 434 Calhoun Street, Ft. Wayne.
- W. W. MULKEY, prescription clerk, with W. H. Brannon, Buena Vista, Ga.
- A. D. McDONELL, prescription clerk, with S. M. Smith, Osgood, Ind.
- C. M. McKELLIPS, Assistant in Chemistry, Purdue University, LaFayette, Ind.
- J. F. REINHART, prescription clerk, with J. J. Wolf, 801 Lincoln Avenue, Peoria, Ill.
- CARL SCHELLER, pharmacist, Evansville, Ind.
- EMIL M. SCHNAIBLE, prescription clerk, with Crain Bros., 4th Street, LaFayette, Ind.
- MISS INEZ THOMPSON, prescription clerk, with J. S. Morgan, Elizabethtown, Ind.
- HARRY E. WEINLAND, prescription clerk, with F. W. Shultz, Brazil, Ind.

With the Degree of Pharmaceutical Chemist.

1894.

JUSTUS C. HOUSER, in the firm of the Houser Drug Co., Flat River, Mo. *

1896.

WILLIAM R. BANNON, Indianapolis, Ind.

H. E. FREEHAFFER, prescription clerk, with Milton & Eliel, South Bend, Ind.

JOHN P. FRITZ, pharmacist, 355 Virginia Avenue, Indianapolis, Ind.

CHARLES E. INCO, prescription clerk, with John Laval & Sons, 220 Main Street, Evansville, Ind.

EDWARD L. MERTZ, pharmacist, in the firm of Mertz & Co., 434 Calhoun Street, Ft. Wayne.

A. D. McDONELL, prescription clerk, with S. M. Smith, Osgood, Ind.

C. M. McKELLIPS, Assistant in Chemistry, Purdue University, LaFayette, Ind.

EMIL M. SCHNAIBLE, prescription clerk, with Crain Bros., LaFayette, Ind.

MISS INEZ THOMPSON, prescription clerk, with J. S. Morgan, Elizabethtown, Ind.

CHARLES E. VANDERKLEED, Student-Assistant in Chemistry, Purdue University, LaFayette, Ind.

HARRY E. WEINLAND, prescription clerk, with F. W. Shultz, Brazil, Ind.



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